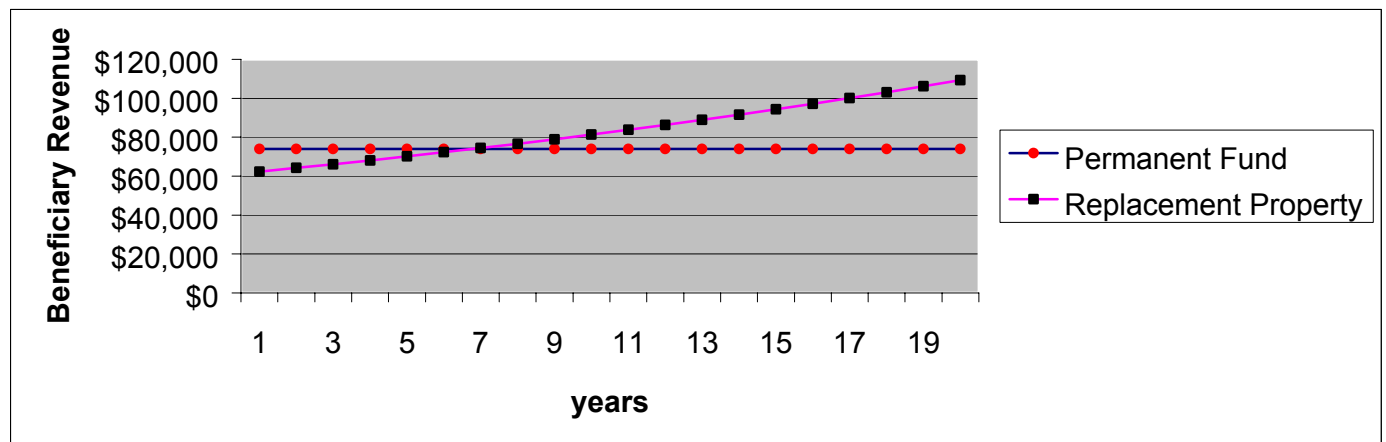


Chapter 8: Costs and Benefits Over Time

One important difference between these two alternative investments is that the beneficiary receives all of the coupon return on the permanent fund as it is earned. The appreciation in replacement land value accrues to the value of the asset and is realized by the beneficiary through higher rents and/or higher prices for the sale of the assets. Graph 3 shows a comparison of the cash flow to the beneficiary from investing \$1,000,000 in replacement land with a real rent of 5.0 percent where rents increase over time at the rate of inflation or the permanent fund at a nominal return of 6.8 percent.

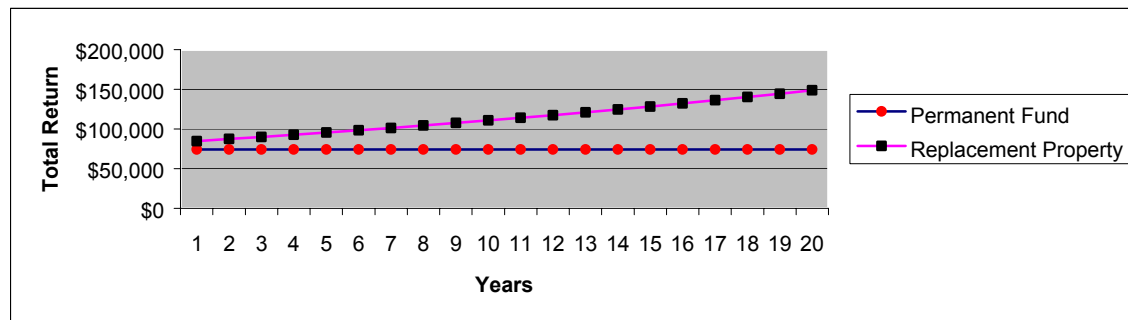
The revenue to the beneficiary is higher from investment in the permanent fund during the first six years. During the seventh year the revenue to the beneficiary from the two investments is equal. By the end of the 20-year period the income on the replacement land is almost half again greater than the return from the permanent fund; and in addition the nominal value of the property has increased by 80 percent to \$1,800,000 while the bond has a nominal value of \$1,000,000.

Graph 3: Net Cash Flow to Beneficiaries from Investment in Permanent Fund or Replacement Property



When the appreciation of the asset is included as in Graph 4, the total return to beneficiaries from investment in replacement property is greater than the return on the permanent fund in all years. Total return is the appropriate approach to performance evaluation. It includes not only net income realized from land management activities but also the unrealized change in land asset value³⁹. The appreciation in asset value is equal to the present value of anticipated increase in future revenue to the trust beneficiaries. By the end of the 20-year projection period the net return is twice that on the permanent fund.

Graph 4: Total Return (Cash to beneficiary plus appreciation of the asset) from Investment in Permanent Fund or Replacement Property



³⁹ See “Endowment Fund Reform and Idaho’s State Lands Evaluating Financial Performance of Forest and Rangeland Assets” by Jay O’laughlin and Philip S. Cook page 3 & 25.